

**CLAIMS:**

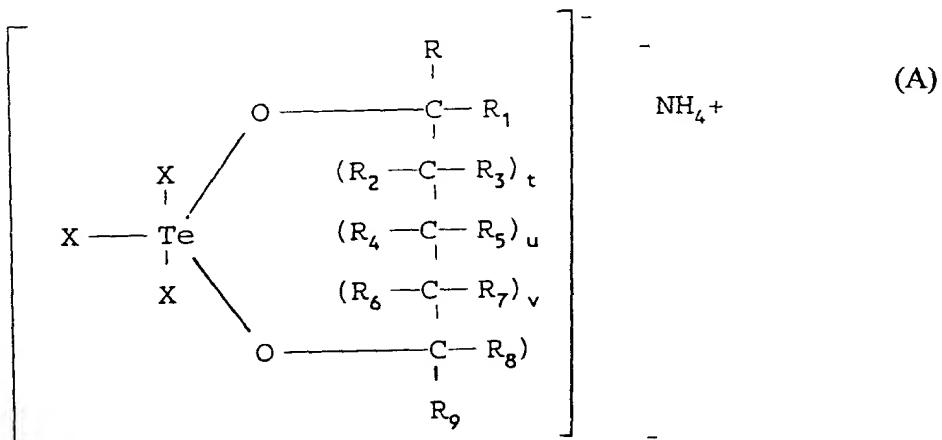
1. A feed composition for enhancing the weight gain or feed conversion efficacy of poultry which comprises an effective amount of a source of tellurium.

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2. A feed composition as in Claim 1, wherein the source of tellurium is an organic tellurium.

10 3. A feed composition for enhancing the weight gain or feed conversion efficacy of poultry, comprising an effective amount of a compound of the formula:

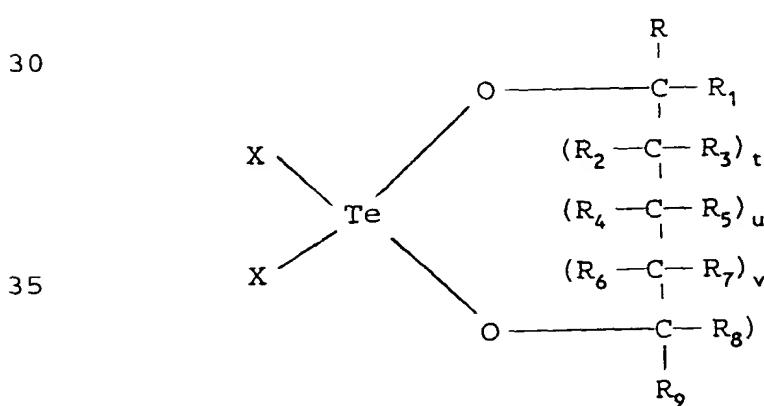
TOP SECRET 60  
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or the complex of  $\text{TeO}_2 \cdot \text{HOCH}_2\text{CH}_2 \cdot \text{NH}_4\text{Cl}$ ;

or

(B)



TOP SECRET 650

or (C)  
TeO<sub>2</sub> or complexes of TeO<sub>2</sub>  
or (D)  
PhTeCl<sub>3</sub>  
5 or  
(C<sub>6</sub>H<sub>5</sub>)<sub>4</sub>P+(TeCl<sub>3</sub>(O<sub>2</sub>C<sub>2</sub>H<sub>4</sub>))-  
or  
TeX<sub>4</sub>,  
wherein t is 1 or 0; u is 1 or 0; v is 1 or 0; R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are the  
10 same or different and are independently selected from the group consisting of hydrogen,  
hydroxyalkyl of 1 to 5 carbons, hydroxy, alkyl of 1 to 5 carbon atoms, halogen, haloalkyl of 1  
to 5 carbon atoms, carboxy, alkylcarbonylalkyl of 2 to 10 carbons, alkanoyloxy of 1 to 5  
carbon atoms, carboxyalkyl of 1 to 5 carbons atoms, acyl, amido, cyano, amidoalkyl of 1 to 5  
15 carbons, N-monoalkylamidoalkyl of 2 to 10 carbons, N,N-dialkylamidoalkyl of 4 to 10  
carbons, cyanoalkyl of 1 to 5 carbons alkoxy of 1 to 5 carbon atoms, alkoxyalkyl of 2 to 10  
carbons, cyanoalkyl of 1 to 5 carbons1 and -COR<sub>10</sub> wherein R<sub>10</sub> is alkyl of from 1 to 5 carbons; and X is halogen and  
20 complexes thereof.

4. A feed composition as defined in Claim 3 wherein the compound is a tellurium  
compound which is ammonium trichloro (dioxoethylene-O,O') tellurate or the complex of  
TeO<sub>2</sub>, ethylene glycol and ammonium chloride.

5. A feed composition as defined in Claim 3 wherein the source for tellurium is an  
organic tellurium.

25 6. A method for enhancing weight gain in poultry, comprising orally administering  
to said poultry a feed composition comprising, as an active ingredient, tellurium compounds  
as defined in Claim 3.

30 7. A method for enhancing the weight gain in poultry by feeding a feed composition  
comprising, by weight of the diet,  
(a) a standard feeding diet containing about 0.0001% of a non-toxic source of  
selenium; and  
(b) about 0.0005% of a tellurium compound.

8. A dietary supplement for enhancing weight gain in poultry comprising  
(a) a non-toxic source of selenium; and  
(b) a tellurium compound.

5 9. A dietary supplement for enhancing weight gain in poultry as set forth in claim 8  
where the tellurium compound is organic tellurium.

10 10. A feed composition as defined in Claim 3 where the tellurium compound is  
administered in combination with at least one vitamin or trace element.

10 11. A feed composition as defined in Claim 3 where the tellurium compound is  
administered in combination with at least one medicament ingredient from the group  
consisting of antibiotics, vaccines, growth enhancers.

15 12. A feed composition as defined in Claim 3 wherein the tellurium compound is  
administered in combination with trace elements either singly or in combination which  
includes cobalt, copper, manganese, iron, zinc, tin, nickel, chromium, molybdenum, iodine,  
chlorine, silicon, vanadium, selenium, calcium, magnesium, sodium and potassium.

20 13. A composition as defined in Claim 3 wherein the tellurium compound is  
administered in combination with selenium.

25 14. A composition as defined in Claim 3 wherein the non-toxic selenium source is  
sodium selenite.

15 15. A composition as defined in Claim 3 wherein the tellurium compound is  
administered orally.

30 16. A composition as defined in Claim 1 wherein the compound is administered in  
combination with vitamins either singly or in combination chosen from the group consisting  
of thiamine HCl, riboflavin, pyridoxine, niacin, inositol, choline chloride, calcium  
pantothenate, biotin, folic acid, ascorbic acid, vitamin B12, p-aminobenzoic acid, vitamin A,  
vitamin K, vitamin D, vitamin E.

17. A pharmaceutical composition which comprises a therapeutically effective amount of the compound as set forth in Claim 3 in admixture with a pharmaceutically acceptable carrier or diluent.

5        18. A method for feeding for enhancing poultry growth, prophylaxis or treatment, which comprises administering to said poultry a therapeutically effective amount of the compound as set forth in Claim 3.

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PROSECUTION DOCUMENTS  
TEN YEARS

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